

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/211,312

180  
AU 1807-

1213  
DATE: 02/09/95  
TIME: 12:45:00

INPUT SET: S2235.raw

This Raw Listing contains the General  
Information Section and up to the first 5 pages.

SEQUENCE LISTING

ENTERED

(1) General Information:

(i) APPLICANT: LABIGNE, AGNES  
CUSSAC, VALERIE  
FERRERO, RICHARD

(ii) TITLE OF INVENTION: GENES OF HELICOBACTER PYLORI NECESSARY  
FOR THE REGULATION AND MATURATION OF UREASE AND THEIR USE

(iii) NUMBER OF SEQUENCES: 12

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT,  
P.C.

(B) STREET: 1755 S. Jefferson Davis Highway, Suite 400

(C) CITY: Arlington

(D) STATE: Virginia

(E) COUNTRY: U.S.A.

(F) ZIP: 22202

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk

(B) COMPUTER: IBM PC compatible

(C) OPERATING SYSTEM: PC-DOS/MS-DOS

(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: US 08/211,312

(B) FILING DATE: 01-JUL-1994

(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: FR 91 12198

(B) FILING DATE: 03-OCT-1991

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: PCT/FR92/00921

(B) FILING DATE: 02-OCT-1992

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Oblon, Norman F.

(B) REGISTRATION NUMBER: 24,618

(C) REFERENCE/DOCKET NUMBER: 660-075-0XPCT

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/211,312DATE: 02/09/95  
TIME: 12:45:03

INPUT SET: S2235.raw

47 (ix) TELECOMMUNICATION INFORMATION:  
48 (A) TELEPHONE: (703) 413-3000  
49 (B) TELEFAX: (703) 413-2220  
50 (C) TELEX: 248855 OPAT UR  
51  
52  
53 (2) INFORMATION FOR SEQ ID NO:1:  
54  
55 (i) SEQUENCE CHARACTERISTICS:  
56 (A) LENGTH: 3559 base pairs  
57 (B) TYPE: nucleic acid  
58 (C) STRANDEDNESS: unknown  
59 (D) TOPOLOGY: unknown  
60  
61 (ii) MOLECULE TYPE: DNA (genomic)  
62  
63  
64 (ix) FEATURE:  
65 (A) NAME/KEY: CDS  
66 (B) LOCATION: 2..16  
67  
68 (ix) FEATURE:  
69 (A) NAME/KEY: CDS  
70 (B) LOCATION: 211..795  
71  
72 (ix) FEATURE:  
73 (A) NAME/KEY: CDS  
74 (B) LOCATION: 800..1309  
75  
76 (ix) FEATURE:  
77 (A) NAME/KEY: CDS  
78 (B) LOCATION: 1324..2091  
79  
80 (ix) FEATURE:  
81 (A) NAME/KEY: CDS  
82 (B) LOCATION: 2122..2718  
83  
84 (ix) FEATURE:  
85 (A) NAME/KEY: CDS  
86 (B) LOCATION: 2721..3515  
87  
88  
89 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:  
90  
91 A CTC TTT AGC ATT TTC TAGGATTTTT TAGGAGCAAC GCTCTTAGAT CCTTAGTTTT 56  
92 Leu Phe Ser Ile Phe  
93 1 5  
94  
95 TAGCTCTCTG ATTTTTTGTT TATCAAAAAA TTGGGGGCTT TTTTGTTTT TATTTTTTGT 116  
96  
97 CAATTTACTA TTTTCTTTA TGATTAGCTC AAGCAACAAA AGTTATTCGT AAGGTGCGTT 176  
98  
99 TGTTGTAAAA ATTTTGTGTT GGAAGGAAAA GGCA ATG CTA GGA CTT GTA TTG 228

	Met Leu Gly Leu Val Leu																
	1								5								
100																	
101																	
102																	
103	TTA	TAT	GTT	GGG	ATT	GTT	TTA	ATC	AGC	AAT	GGG	ATT	TGC	GGG	TTA	ACC	276
104	Leu	Tyr	Val	Gly	Ile	Val	Leu	Ile	Ser	Asn	Gly	Ile	Cys	Gly	Leu	Thr	
105				10					15					20			
106																	
107	AAA	GTC	GAT	CCT	AAA	AGC	ACT	GCG	GTG	ATG	AAC	TTT	TTT	GTG	GGT	GGG	324
108	Lys	Val	Asp	Pro	Lys	Ser	Thr	Ala	Val	Met	Asn	Phe	Phe	Val	Gly	Gly	
109			25					30					35				
110																	
111	CTC	TCC	ATT	ATT	TGT	AAT	GTG	GTT	GTC	ATC	ACT	TAT	TCC	GCT	CTC	AAC	372
112	Leu	Ser	Ile	Ile	Cys	Asn	Val	Val	Val	Ile	Thr	Tyr	Ser	Ala	Leu	Asn	
113		40					45					50					
114																	
115	CCT	ACA	GCC	CCT	GTA	GAA	GGT	GCT	GAA	GAT	ATT	GCT	CAA	GTA	TCA	CAC	420
116	Pro	Thr	Ala	Pro	Val	Glu	Gly	Ala	Glu	Asp	Ile	Ala	Gln	Val	Ser	His	
117	55					60					65					70	
118																	
119	CAT	TTG	ACT	AAT	TTC	TAT	GGG	CCA	GCG	ACT	GGG	TTA	TTG	TTT	GGT	TTC	468
120	His	Leu	Thr	Asn	Phe	Tyr	Gly	Pro	Ala	Thr	Gly	Leu	Leu	Phe	Gly	Phe	
121					75					80					85		
122																	
123	ACC	TAC	TTG	TAT	GCG	GCT	ATC	AAC	CAC	ACT	TTT	GGT	TTG	GAT	TGG	AGG	516
124	Thr	Tyr	Leu	Tyr	Ala	Ala	Ile	Asn	His	Thr	Phe	Gly	Leu	Asp	Trp	Arg	
125				90					95					100			
126																	
127	CCC	TAC	TCT	TGG	TAT	AGC	TTA	TTC	GTA	GCG	ATC	AAC	ACG	ATT	CCT	GCT	564
128	Pro	Tyr	Ser	Trp	Tyr	Ser	Leu	Phe	Val	Ala	Ile	Asn	Thr	Ile	Pro	Ala	
129			105					110					115				
130																	
131	GCG	ATT	TTA	TCC	CAC	TAT	AGC	GAT	ATG	CTT	GAT	GAC	CAC	AAA	GTG	TTA	612
132	Ala	Ile	Leu	Ser	His	Tyr	Ser	Asp	Met	Leu	Asp	Asp	His	Lys	Val	Leu	
133		120					125					130					
134																	
135	GGC	ATC	ACT	GAA	GGC	GAT	TGG	TGG	GCG	ATC	ATT	TGG	TTG	GCT	TGG	GGT	660
136	Gly	Ile	Thr	Glu	Gly	Asp	Trp	Trp	Ala	Ile	Ile	Trp	Leu	Ala	Trp	Gly	
137	135					140					145					150	
138																	
139	GTT	TTG	TGG	CTT	ACC	GCT											

# RAW SEQUENCE LISTING PATENT APPLICATION US/08/211,312

DATE: 02/09/95  
TIME: 12:45:08

INPUT SET: S2235.raw

153	5	10	15	
154				
155	AGC GTG GAT TAT GTG GAT TTG GAA TGG TTT GAA ACG AGG AAA AAA ATC	901		
156	Ser Val Asp Tyr Val Asp Leu Glu Trp Phe Glu Thr Arg Lys Lys Ile			
157	20 25 30			
158				
159	GCT CGC TTT AAA ACC AGG CAA GGC AAA GAC ATA GCC GTA CGC CTT AAA	949		
160	Ala Arg Phe Lys Thr Arg Gln Gly Lys Asp Ile Ala Val Arg Leu Lys			
161	35 40 45 50			
162				
163	GAC GCT CCC AAG TTG GGT TTC TCT CAA GGA GAT ATT TTA TTT AAA GAA	997		
164	Asp Ala Pro Lys Leu Gly Phe Ser Gln Gly Asp Ile Leu Phe Lys Glu			
165	55 60 65			
166				
167	GAG AAG GAA ATT ATC GCC GTT AAT ATC TTG GAT TCT GAA GTC ATT CAC	1045		
168	Glu Lys Glu Ile Ile Ala Val Asn Ile Leu Asp Ser Glu Val Ile His			
169	70 75 80			
170				
171	ATC CAA GCT AAG AGC GTG GCA GAA GTA GCG AAA ATA TGC TAT GAA ATA	1093		
172	Ile Gln Ala Lys Ser Val Ala Glu Val Ala Lys Ile Cys Tyr Glu Ile			
173	85 90 95			
174				
175	GGA AAC CGC CAT GCG GCT TTA TAC TAT GGC GAG TCT CAA TTT GAA TTT	1141		
176	Gly Asn Arg His Ala Ala Leu Tyr Tyr Gly Glu Ser Gln Phe Glu Phe			
177	100 105 110			
178				
179	AAA ACA CCA TTT GAA AAG CCC ACG CTA GCG TTA CTA GAA AAG CTA GGG	1189		
180	Lys Thr Pro Phe Glu Lys Pro Thr Leu Ala Leu Leu Glu Lys Leu Gly			
181	115 120 125 130			
182				
183	GTT CAA AAT CGT GTT TTA AGT TCA AAA TTG GAT TCC AAA GAA CGC TTA	1237		
184	Val Gln Asn Arg Val Leu Ser Ser Lys Leu Asp Ser Lys Glu Arg Leu			
185	135 140 145			
186				
187	ACC GTG AGC ATG CCC CAT AGT GAG CCT AAT TTT AAG GTC TCA CTG GCG	1285		
188	Thr Val Ser Met Pro His Ser Glu Pro Asn Phe Lys Val Ser Leu Ala			
189	150 155 160			
190				
191	AGC GAT TTT AAA GTG GTC ATG AAA TAGAAAAACA ACAA ATG GAT AAA GGA	1335		
192	Ser Asp Phe Lys Val Val Met Lys Met Asp Lys Gly			
193	165 170 1			
194				
195	AAA AGC GTG AAA AGC ATT GAA AAA AGC GTG GGT ATG CTC CCA AAA ACT	1383		
196	Lys Ser Val Lys Ser Ile Glu Lys Ser Val Gly Met Leu Pro Lys Thr			
197	5 10 15 20			
198				
199	CCA AAG ACA GAC AGC AAT GCT CAT GTG GAT AAT GAA TTT CTG ATT CTG	1431		
200	Pro Lys Thr Asp Ser Asn Ala His Val Asp Asn Glu Phe Leu Ile Leu			
201	25 30 35			
202				
203	CAA GTC AAT GAT GCG GTG TTC CCC ATT GGA TCT TAC ACG CAT TCT TTT	1479		
204	Gln Val Asn Asp Ala Val Phe Pro Ile Gly Ser Tyr Thr His Ser Phe			
205	40 45 50			

[REDACTED]

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION US/08/211,312**

DATE: 02/09/95  
TIME: 12:45:11

**INPUT SET: S2235.raw**

	<i>INPUT SET: S2235.raw</i>																												
206																													
207	GGG	CTT	TTG	GCT	AGA	AAC	TTA	CAT	CCA	GCA	AAA	AAG	GTT	ACT	AAT	AAA													
208	Gly	Leu	Leu	Ala	Arg	Asn	Leu	His	Pro	Ala	Lys	Lys	Val	Thr	Asn	Lys													1527
209				55					60					65															
210																													
211	GAA	AGC	GCT	TTA	AAA	TAT	TTA	AAA	GCC	AAT	CTC	TCT	AGC	CAG	TTC	CTT													1575
212	Glu	Ser	Ala	Leu	Lys	Tyr	Leu	Lys	Ala	Asn	Leu	Ser	Ser	Gln	Phe	Leu													
213		70					75					80																	
214																													
215	TAC	ACG	GAA	ATG	CTG	AGC	TTG	AAA	CTC	ACC	TAT	GAA	AGC	GCT	CTC	CAA													1623
216	Tyr	Thr	Glu	Met	Leu	Ser	Leu	Lys	Leu	Thr	Tyr	Glu	Ser	Ala	Leu	Gln													
217		85				90					95					100													
218																													
219	CAA	GAT	TTA	AAA	AGG	ATC	TTA	GGG	GTT	GAA	GAA	ATC	ATT	ACG	CTA	TCC													1671
220	Gln	Asp	Leu	Lys	Arg	Ile	Leu	Gly	Val	Glu	Glu	Ile	Ile	Thr	Leu	Ser													
221					105					110					115														
222																													
223	ACA	AGC	CCC	ATG	GAA	TTG	CGA	TTA	GCC	AAT	CAA	AAG	CTA	GGC	AAT	CGT													1719
224	Thr	Ser	Pro	Met	Glu	Leu	Arg	Leu	Ala	Asn	Gln	Lys	Leu	Gly	Asn	Arg													
225				120					125					130															
226																													
227	TTC	ATT	AAA	ACC	TTA	CAA	GCC	ATG	AAC	GAA	TTA	GAC	ATT	GGC	GCA	TTT													1767
228	Phe	Ile	Lys	Thr	Leu	Gln	Ala	Met	Asn	Glu	Leu	Asp	Ile	Gly	Ala	Phe													
229			135				140						145																
230																													
231	TTT	AAC	GCT	TAC	GCT	CAA	CAA	ACC	GAA	GAC	CCC	ACC	CAT	GCC	ACT	AGC													1815
232	Phe	Asn	Ala	Tyr	Ala	Gln	Gln	Thr	Glu	Asp	Pro	Thr	His	Ala	Thr														

PAGE: 1

**SEQUENCE VERIFICATION REPORT**  
**PATENT APPLICATION US/08/211,312**

DATE: 02/09/95  
TIME: 12:45:13

*INPUT SET: S2235.raw*

Line

Error

Original Text